Outdoor Air Quality and Heart Disease

Poor air quality is unhealthy for everyone, but especially for **people with heart disease** — such as **heart failure** or **coronary artery disease**. The recommendations below relate to where and when you exercise. Follow the recommendations related to your specific health condition for how much you exercise. For people with heart disease, poor air quality can cause:

**NOW**
- Shortness of breath
- Chest pain
- Heart attack
- More hospital and emergency visits

**LATER**
- Greater risk of heart attack, stroke, blood clots, and early death

The Air Quality Index (AQI) is a number for reporting how clean or unhealthy your air is every day. You can find it on the Internet at AirNow.gov. It’s also reported in local news sources:

**When AQI is:**

1–50 **GOOD**

- Enjoy usual outdoor activities

51–100 **MODERATE**

- Take it easy outdoors

101–150 **UNHEALTHY** for sensitive groups

- Exercise indoors
- If you have:
  - pain or tightness in the chest, arms, neck, back, or jaw
  - palpitations
  - shortness of breath
  - unusual tiredness
- Call your doctor and don’t exercise

151–200 **UNHEALTHY** for all

- Plan outdoor activities in the morning, when air quality is usually better

201–300 **VERY UNHEALTHY** for all

- Traffic pollution is harmful even when AQI is good
- Whenever possible, avoid outdoor air in places with a lot of traffic
Particulate matter is sometimes reported as PM 2.5 or PM 10. Particulate matter and your heart

**PM 2.5** particles are extremely tiny. Even a face mask won’t keep them out of your airways. They can get into your blood and cause blood vessels to narrow.

**PM 10** particles are a bit bigger. They include things like dust and pollen. Your nose and airways can filter some of these before they reach your heart or lungs.

**Narrowed blood vessels cause serious health problems**

What causes poor air quality?

- **Smoke stacks**
- **Wood burning — inside or outside**
- **Cars and trucks**
- **Blowing dust**

Particulate matter is tiny particles in the air like dust, dirt, soot, and smoke. In northern Utah, it’s more common and more problematic in winter months. Symptoms may come several hours after exposure.

Carbon monoxide is a gas that comes from the exhaust of cars and trucks. It reduces the amount of oxygen that can get to your heart and other organs. Carbon monoxide is usually worse in cold weather.

Particulate matter and your heart

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More ways to take action

- **Pay attention to the air in your home**
  Be sure indoor air is free of smoke and chemical fumes. Ask your doctor if you should get an air filter.

- **Listen to your body**
  Get to know your own responses at different AQI levels — and when you need to change your plans.

- **Get to know your neighborhood**
  Pay attention to places and times of day where air quality affects you most.

- **Learn more**
  Get more information about what you can do to help improve air quality — both outdoors and in your home.

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